

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/003081

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/11 C12Q1/68 G01N33/68 A61K38/00 A61K39/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	<p>WO 2004/031412 A (ONCOTHERAPY SCIENCE, INC; JAPAN AS REPRESENTED BY THE PRESIDENT OF THE) 15 April 2004 (2004-04-15)</p> <p>page 45, lines 23-27</p> <p>page 46, lines 1-7</p> <p>page 67; table 5</p> <p style="text-align: center;">----- -/-</p>	28-50

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

10 August 2005

Date of mailing of the international search report

22/08/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	ASHIDA SHINGO ET AL: "Molecular features of the transition from prostatic intraepithelial neoplasia (PIN) to prostate cancer: Genome-wide gene-expression profiles of prostate cancers and PINs" CANCER RESEARCH, vol. 64, no. 17, 1 September 2004 (2004-09-01), pages 5963-5972, XP002339625 ISSN: 0008-5472 the whole document	1-27, 34-50
P,X	----- NAKAMURA TORU ET AL: "Genome-wide cDNA microarray analysis of gene expression profiles in pancreatic cancers using populations of tumor cells and normal ductal epithelial cells selected for purity by laser microdissection" ONCOGENE, BASINGSTOKE, HANTS, GB, vol. 23, no. 13, 25 March 2004 (2004-03-25), pages 2385-2400, XP002331614 ISSN: 0950-9232 page 2387, left-hand column, last paragraph page 2388; table 1 page 2389; figure 2 page 2399; table 5	28-30, 35-45,48
P,X	----- YAO V J ET AL: "VASCULAR BIOLOGY, ATHEROSCLEROSIS AND ENDOTHELIUM BIOLOGY TARGETING PANCREATIC ISLETS WITH PHAGE DISPLAY ASSISTED BY LASER PRESSURE CATAPULT MICRODISSECTION" AMERICAN JOURNAL OF PATHOLOGY, PHILADELPHIA, PA, US, vol. 166, no. 2, February 2005 (2005-02), pages 625-636, XP009046949 ISSN: 0002-9440 page 629; table 1	28-30, 35-45,48
X	----- WO 95/28484 A (AMGEN INC) 26 October 1995 (1995-10-26) sequence SEQ ID NO 14 ----- -/-	9,10, 12-14, 24-26, 34-46, 48,49

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DOTTORI M ET AL: "EphA4 (Sek1) receptor tyrosine kinase is required for the development of the corticospinal tract" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 95, no. 22, 27 October 1998 (1998-10-27), pages 13248-13253, XP002286945 ISSN: 0027-8424 page 13249, right-hand column, paragraph 3</p>	24, 35-44
X	<p>IRVING CAROL ET AL: "Progressive spatial restriction of Sek-1 and Krox-20 gene expression during hindbrain segmentation" DEVELOPMENTAL BIOLOGY, vol. 173, no. 1, 1996, pages 26-38, XP002339626 ISSN: 0012-1606 page 27, right-hand column, paragraph 2 page 30, left-hand column, paragraph 1</p>	26
X	<p>WO 02/30268 A (EOS BIOTECHNOLOGY, INC) 18 April 2002 (2002-04-18) sequence 69</p>	15-17, 20-22
X	<p>WO 03/009814 A (MILLENNIUM PHARMACEUTICALS, INC; SCHLEGEL, ROBERT; MONAHAN, JOHN, E; E) 6 February 2003 (2003-02-06) sequence 96</p>	15-17, 20-22
X	<p>US 6 506 607 B1 (SHYJAN ANDREW W) 14 January 2003 (2003-01-14) sequence 9</p>	15-17, 20-22
A	<p>US 6 071 697 A (SOSA-PINEDA ET AL) 6 June 2000 (2000-06-06)</p>	

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claim 10 (as far as an "in vivo" method is concerned) and claims 15-22, 28 are directed to a method of treatment of the human body, the search has been carried out and based on the alleged effects of the compound.
2. ☒ Claims Nos.: 23, 27
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

Continuation of Box II.1

Although claim 10 (as far as an "in vivo" method is concerned) and claims 15-22, 28 are directed to a method of treatment of the human body, the search has been carried out and based on the alleged effects of the compound.

Continuation of Box II.2

Claims Nos.: 23, 27

Present claims 23 and 27 relate to a compound defined by reference to a desirable characteristic or property, namely its capacity to be obtained by the screening method of any of claims 9-14.

The claims cover all compounds having this characteristic or property, whereas the application provides no support within the meaning of Article 6 PCT and no disclosure within the meaning of Article 5 PCT any of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently no search has been carried out for the subject-matter of claims 23 and 27.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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